

**TRANSMITTAL
FORM**

(to be used for all correspondence after initial filing)

TRANSMITTAL FORM (to be used for all correspondence after initial filing)		Application Number	10/602,548
		Filing Date	June 23, 2003
		First Named Inventor	Tang, Hongxing
		Art Unit	2855
		Examiner Name	Allen, Andre J.
Total Number of Pages in This Submission	6	Attorney Docket Number	009195-000520US

ENCLOSURES (Check all that apply)

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Remarks		The Commissioner is authorized to charge any additional fees to Deposit Account 20-1430.

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual	Townsend and Townsend and Crew LLP Gerald T. Gray	Reg. No. 41,797
Signature	<i>Gerald T. Gray</i>	
Date	May 5, 2004	

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

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Signature	<i>Marta Vanegas</i>	Date	May 5, 2004

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PATENT
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May 5, 2004

TOWNSEND and TOWNSEND and CREW LLP

By:

Marta R. Vanegas

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Hongxing Tang et al.

Application No.: 10/602,548

Filed: June 23, 2003

For: SENSORS BASED ON GIANT
PLANAR HALL EFFECT IN DILUTE
MAGNETIC SEMICONDUCTORS

Examiner: Allen, Andre J.

Art Unit: 2855

INFORMATION DISCLOSURE
STATEMENT UNDER 37 CFR §1.97 and
§1.98

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

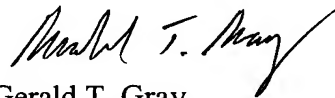
The references cited on attached form PTO/SB/08A and PTO/SB/08B are being called to the attention of the Examiner. Copies of the references are enclosed. It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

Also enclosed is a copy of the International Search Report for the corresponding PCT application, PCT/US03/19863.

As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

Applicant believes that no fee is required for submission of this statement. However, if a fee is required, the Commissioner is authorized to deduct such fee from the undersigned's Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,



Gerald T. Gray
Reg. No. 41,797

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60208977 v1



INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)			Complete if Known		
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			Examiner Name	Allen, Andre J.	
Sheet	1	of	3	Attorney Docket Number	009195-000520US

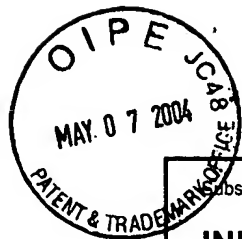
U.S. PATENT DOCUMENTS+					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Kind Code ² (if known)			
	1	US-3,818,328	06-18-1974	Zinn	
	2	US-4,618,901	10-21-1986	Hatakeyama et al.	
	3	US-4,816,946	03-28-1989	Kira et al.	
	4	US-5,390,061	02-14-1995	Nakatani et al.	

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)				
	5	WO	2004/001805	A2	12-31-2004	California Institute of Technology		<input type="checkbox"/>
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60208977 v1



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Sheet	2	of	3	Attorney Docket Number	009195-000520US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	6	Abolfath, M. et al., "Theory of magnetic anisotropy in $\text{III}_{1-x}\text{Mn}_x\text{V}$ Ferromagnets," <u>Phys. Rev. B</u> , Vol. 63, p. 054418 (2001)	
	7	Cowburn, R.P. et al., "Multijump magnetic switching in in-plane magnetized ultrathin epitaxial Ag/Fe/Ag(001) films," <u>Phys. Rev. Lett.</u> , Vol. 79, p. 4018 (1997)	
	8	Dietl, R. et al., "Hole-mediated ferromagnetism in tetrahedrally coordinated semiconductors," <u>Phys. Rev. B</u> , Vol. 63, p. 195205 (2001)	
	9	Dietl, R. et al., "Zener model description of ferromagnetism in zinc-blende magnetic semiconductors," <u>Science</u> , Vol. 287, p. 1019 (2000)	
	10	Divincenzo, D.P., "Quantum computing and single-qubit measurements using the spin-filter effect (invited)," <u>J. Appl. Phys.</u> , Vol. 85, p. 4785 (1999)	
	11	Fukumura, T. et al., "Magnetic domain structure of a ferromagnetic semiconductor (Ga,Mn)As observed with scanning probe microscopes," <u>Physica E</u> , Vol. 10., p. 135 (2001)	
	12	Gwo, S. et al. "Surface reconstruction and ultrasmooth morphology of high-temperature grown $\text{AlAs}(001)\text{-}3\times 2$," <u>Proc. 23rd Int. Conf. Phys. Semiconductors</u> , Berlin 1996, Scheffler, M. and R. Zimmermann, eds., World Scientific, Singapore (1996)	
	13	Hong, K. and N. Giordano, "Approach to microscopic magnetic measurements," <u>Phys. Rev.</u> , Vol. 51, No. 15, p. 9855 (1995)	
	14	Jan, J.P., "Galvanomagnetic and thermomagnetic effects in metals," in <u>Solid State Physics</u> , Seitz, F. and D. Turnbull, eds., New York Academic Press, Vol. 5, pp. 1-96	
	15	König, J. et al., "Theory of magnetic properties and spin-wave dispersion for ferromagnetic (Ga,Mn)As," <u>Phys. Rev. B</u> , Vol. 64, p. 194423 (2001)	
	16	Ma, Z. et al., "Solid-state reaction-mediated low-temperature bonding of GaAs and InP wafers to Si substrates," <u>Appl. Phys. Lett.</u> , Vol. 64, No. 6, p. 772 (1994)	
	17	Ohno, H. et al., "Electric-field control of ferromagnetism," <u>Nature</u> , Vol. 401, p. 944 (2000)	
	18	Ono, T. et al., "Propagation of a magnetic domain wall in a submicrometer magnetic wire," <u>Science</u> , Vol. 284, p. 468 (1999)	
	19	Prinz, G., "Magnetoelectronics," <u>Science</u> , Vol. 282, p. 1660 (1998)	
	20	Sander, D. et al., "Film stress and domain wall pinning in sesquilayer iron films on $\text{W}(110)$ " <u>Phys. Rev. Lett.</u> , Vol. 77, p. 2566 (1996)	
	21	Schmidt, G. and L.W. Mollenkamp, "Electrical spin injection using dilute magnetic semiconductors" <u>Physica E</u> , Vol. 10, p. 84 (2001)	

Examiner Signature		Date Considered	
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* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.



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	22	Stoner, E.C. and E.P. Wohlfarth, "A mechanism of magnetic hysteresis in heterogeneous alloys," Philos. Trans. R. Soc. London A, Vol. 240, p. 74 (1948)	
	23	Wunderlich, J. et al., "Influence of geometry on domain wall propagation in a mesoscopic wire" IEEE Trans. Magn. Vol. 37, p. 2104 (2001)	

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